

## REMARKS

Claims 17-21 and 32-51 are pending in the application, of which Claims 20-21 and 35-36 have been withdrawn from consideration. Claim 51 has been amended to resolve a potential ambiguity. Bases for the amendment can be found throughout the application, drawings and claims as originally filed and as such, no new matter has been presented. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### REJECTION UNDER 35 U.S.C. § 103

Claims 17-19, 32-34, 37-44, and 48-51 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ito et al. (Japanese Pat. Application No. 2002-17621; "Ito '621") in view of Bass et al. (U.S. Pat. No. 5,787,546). This rejection is respectfully traversed.

Applicant submits that the Office has not presented a *prima facie* case of obviousness in that (1) the Office has not provided a reason, suggestion or motivation from the prior art as a whole for the person of ordinary skill to have combined the references; (2) the combination of references does not teach or suggest each element of the claims; and (3) the Office has not considered Applicant's claims as a whole.

Concerning the reason, suggestion or motivation from the prior art, Applicant notes that the Office has characterized Ito et al. that is capable of generating a "dirt and debris laden air flow; and swirling the dirt ... and debris laden air flow around a perimeter of the filter within an interior of the container", but that "Ito et al. does not disclose that the vacuum is driven by battery power." The Office has stated that "hand-

held vacuum cleansers are notoriously known for being powered by either a wall outlet and electrical cord or battery powered” and that Bass et al. discloses a hand-held vacuum cleaner that can be powered by either a wall outlet and electrical cord or a battery. The Office concludes that it therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the vacuum cleaner of Ito et al. with a battery to power the vacuum cleaner in view of the teachings of Bass et al. Applicant notes, however, that the vacuum of Bass et al. does not employ a swirling action but rather is a conventional vacuum.

Applicant notes that a swirling air flow is not efficient since some of the energy that is employed to move the air is diverted from an axial direction (i.e., traveling directly from the inlet of the vacuum through the filter to the fan) to a tangential direction. Applicant further notes that as the mass flow rate of the air flow (i.e., amount and velocity) and battery life are key considerations in the performance of a hand-held cordless vacuum. Accordingly, Applicant submits that one of ordinary skill in the art would not have been motivated modify the vacuum of Ito et al. so that it is driven by the battery of Bass et al.

Applicant submits that the Patent Laws provide that an invention is not obvious when the suggestion to combine combines from the patentee/applicant. For example, the Federal Circuit reversed a trial court’s holding of obviousness in *ACS Hospital Systems, Inc. v. Montefiore Hospital* because the only source of the suggestion to combine the prior art references was the appellant’s patent itself. As stated by the Federal Circuit:

The court below identified no source, other than the Sonnenberg patent itself, for the suggestion to use override switching means in a television rental system. Obviousness cannot be established by combining the teaching of the prior art to produce the claimed

invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. The prior art of record fails to provide any suggestion or incentive.

732 F.2d 1752, 221 USPQ 929 (1984).

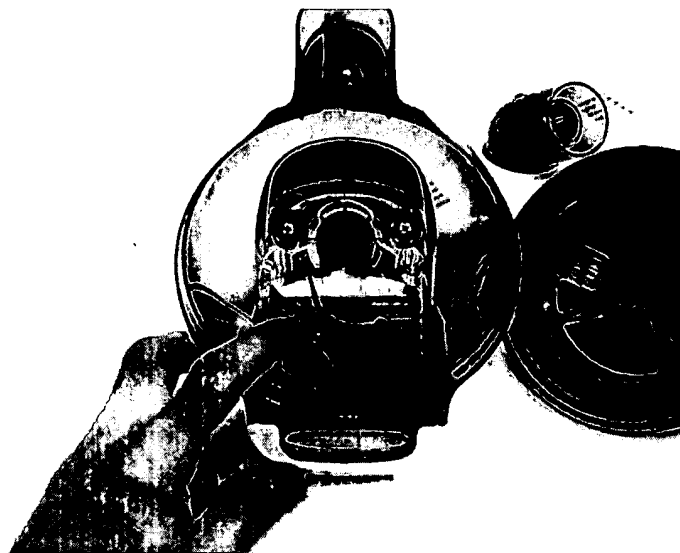
Appellant further notes that the Patent Laws draw a distinction between trade-offs and motivation to combine: trade-offs often concern what is feasible, not what is necessarily desirable, whereas motivation to combine requires the latter. See, e.g., *Winner International Royalty Corp. v. Wang*, 2002 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir.), *cert. denied*, 530 U.S. 1238 (2000).

[A]lthough *Graham v. John Deere Co.*, 383 U.S. at 17, 148 USPQ at 476, requires that certain factual inquiries, among them the differences between the prior art and the claimed invention, be conducted to support a determination of the issue of obviousness, the actual determination of the issue requires an evaluation in the light of the findings in those inquiries of the obviousness of *the claimed invention as a whole*, not merely the differences between the claimed invention and the prior art.

*Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 221 USPQ 1025, 1033 (Fed. Cir. 1984)(emphasis added). See also *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 225 USPQ 26, 31 (Fed. Cir. 1985) (That each “element” was old at the time the invention was made was undisputed in the PTO, at trial, and before this court. There is no basis in the law, however, for treating combinations of old elements differently in determining patentability. ... The critical inquiry is whether “there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.” *Lindemann Mashinefabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d at 1462, 221 USPQ at 488.)

Concerning the teaching or suggestion of all claim elements, Applicant notes that independent Claims 17, 32 and 37 each recite a structure in which an inlet port extends longitudinally in a dirt collection chamber or container that receives/stores dirt and debris collected by the vacuum. In contrast, neither Ito et al. nor Bass et al. teach or

suggest this arrangement. More specifically, the Office has characterized the structure (23) as being the inlet port, but this structure does not extend longitudinally in the container (14) of Ito et al. Rather, this structure is disposed entirely outside the container (14). Applicant notes that the structure in the container (14) that appears to be associated with the structure (23) identified by the Office as being an "inlet port" is



actually a sheet of a resilient material that is affixed to the interior of the container (14); the sheet of material appears to form a valve that inhibits the egress of stored dirt and debris through the structure (23) when the vacuum is not in operation. This resilient sheet of material is clearly

shown in the digital pictures submitted to the Office in the Supplemental Information Disclosure Statement filed June 5, 2006.

Concerning independent Claim 49, Applicant notes that the claim recites that the dirt and debris laden air flow is directed longitudinally through the container and thereafter in a circumferential direction about the container. Applicant notes that the container is the portion of the dirt cup in which dirt and debris are stored. Applicant notes that the Ito et al. appears to direct air into the container (14) through a flapper valve. The air entering the container (14) does not flow longitudinally nor does it appear to change direction from a longitudinally extending direction to a circumferential direction after it has entered the container (14).

Concerning Claim 51, Applicant notes that the structure (23) identified by the Office as being the inlet port discharges air directly against the filter as shown in Figure 6 of Ito et al. In this regard, the filter and the container (14) appear to cooperate to form a circumferentially extending flow channel and that the filter, the wall of the container (14) and the flapper valve constrain the air flow so that it follows the circumferential channel. Accordingly, Ito et al. does not direct a dirt and debris laden air flow in a dirt cup longitudinally through the container and thereafter in a direction about the filter. Moreover, the air discharged from the structure (23) in Ito et al. is directly in-line with the filter.

In view of the above remarks, Applicant submits that the Office has not presented a *prima facie* case of obviousness in that the Office has not set forth a reason, motivation or suggestion to combine the references, the proposed combination of Ito et al. and Bass et al. does not teach or suggest each element of the claims and the Office has not considered the claims as a whole. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of 17-19, 32-34, 37-44, and 48-51 stand rejected under 35 U.S.C. § 103(a).

Additionally, Applicant notes that the proposed combination of Ito et al. and Bass et al. does not teach or suggest each element of Claims 40 and 48. In this regard, the proposed combination does not teach or suggest a flow deflector having an outlet that faces a side of the dirt cup and rearwardly toward the housing. In contrast, the structure defined by the Office as being the outlet of the Ito et al. reference appears to be perpendicular to the housing. Accordingly, Applicant submits that the combination of

Ito et al. and Bass et al. does not present a *prima facie* case of obviousness for Claims 40 and 48.

Claims 45-47 stand rejected as being unpatentable over Ito '621, as modified over Bass et al., as applied to Claim 44 above, and further in view of Ito et al. (Japanese Pat. Application No. 2002-136456; "Ito '456"). This rejection is respectfully traversed.

Applicant refers the Examiner to the above-section for a discussion of Claim 32. Applicant notes that Claims 45-47 depend from Claim 32 and as such, Applicant respectfully requests reconsideration and withdrawal of the rejection of these claims for the reasons set forth, above.

#### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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